

## **Traffic jam influence on the economic losses to society as exemplified by the city of Kazan**

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### **Abstract**

The economic growth and prosperity are one of the main goals of the modern society. But in the conditions of limited resources, the increase in aggregate welfare of each person could eventually lead to significant negative socio-economic phenomena. We consider traffic jams in cities such a problem. The growing number of motor vehicles owned by citizens inevitably leads to an increase in time spent on the road. And this, in its turn, creates excessive costs of the society as a result of irrational resources management and use. Capital investment to modernize the traffic system can not be made equally with the corresponding society needs. Based on the statistical data analysis, in this article we illustrated this problem as exemplified by the city of Kazan, capital of the Republic of Tatarstan, as well as we presented a quantitative calculation of these losses. Similar analysis is possible to use for other cities around the world. Consideration of the road flow and various models explaining its nature allows us to suggest an entirely new solution to the extremely important and complex problem. Implementation of our proposed method to combat the traffic jams could enable to create a highly efficient road network, which transaction costs would be kept to a minimum.

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### **Keywords**

Economic irrationality, Modern city, Planning, Solution to traffic jam problem, Traffic jams, Transaction costs